SECTION UC-075

WATER SERVICE INSTALLATIONS

PART 1 - GENERAL

1.01 SCOPE

This Contractor shall furnish all labor, material and equipment required to construct water service installations, as specified herein.

1.02 RELATED SECTION

Section UC-080 - Meter Boxes, Sectional Plates and Vaults for Water Service
Section UC-085 - Water Meter Valves

PART 2 - PRODUCTS

2.01 For service terminal fittings and other required miscellaneous products see Section 15065.

PART 3 - EXECUTION

3.01 INSTALLATION OF 1-INCH SERVICES

A. Services from the new water mains shall consist of corporation stops, 1-inch copper tubing and terminal fittings as shown in the Standard Details. All service installations from the new main shall be installed by the Contractor. Service installations from existing mains, if required, will be installed by Department forces, and the cost for materials and labor furnished by the Department shall be borne by the Contractor.

B. Where possible, all meter boxes shall be installed in non-traffic and non-parking areas.

C. Where meter boxes are located in existing sidewalks, the whole flag of sidewalk shall be removed and replaced with new concrete. The concrete walk shall be 4 inches thick and finished with the proper tools and techniques to resemble the existing walk. The concrete support for meter boxes shall be eliminated when the box is installed in an existing sidewalk. Where meter boxes are located out of sidewalk areas, a concrete support is required. Concrete supports shall be to the established line and grade.

D. Meter boxes shall be set flush with the finished grade if in sidewalks, or flush with the top of the ground if out of sidewalk areas.

E. All bends in copper tubing shall be made with an approved type tube bender to the satisfaction of the Department. Flattened, out of round or kinked tubing will not be permitted.

E. One inch service connections shall be one of the following:

1. Short Single - Consisting of a short run of 1-inch copper tubing from the main on the same side of the street as the propo sed meter, to the meter installation approximately 2 ½ feet from property line. Single meter box installation included.

2. Long Single - Same as above but from a main on the opposite side of the street from the proposed meter, requiring additional copper tubing to cross the street to the meter installation, and requiring a 1 ½-inch Schedule 40 black steel casing pipe, to be driven under the street pavement. Single meter box installation included.

3. Short Dual - Consisting of a short run of 1-inch copper tubing from the main on the same side of the street as the proposed meter to the meter installation, approximately 2 ½ feet from the property line and branched off to serve an additional customer. Dual meter box installation included.

4. Long Dual - Same as above but from a main on the opposite side of the street from the proposed meter requiring additional copper tubing to cross the street to the meter installation and requiring a 1 ½-inch Schedule 40 black steel casing pipe to be driven under the street pavement. Dual meter box installation included.

F. If black steel casing pipe for one-inch services crossing existing pavement is required, the pipe may be driven from the side of the street which affords the most room for the driving trench, thus resulting in the least number of couplings in the casing. Extra care shall be used in leveling and heading the first length of casing in the proper direction. One method of driving casing, known to work in this area and offered here as a suggestion, is to use an ordinary coupling screwed on the leading end of the casing as a cutting edge, and driving against a coupling screwed on the tailing end with a special tool in a pneumatic hammer, while maintaining a steady pull forward on the hammer with a small winch. Each length of casing as driven shall be cleaned out with compressed air introduced through a one-half-inch pipe at least as long as the casing. The purpose of driving casing pipe is to make it unnecessary to repair paving over one-inch service cuts. Should the Contractor elect to open-trench any one-inch service line across pavement, he will be required to repair the paving.

G. The Contractor shall install the meter box, 1-inch branch assembly, 30 inch tailpieces and perforated spacers.

H. When installing services the Contractor shall temporarily plug the ends of the tail pieces for protection against dirt.

I. Pipe bedding and the backfill material to at least 6 inches above the crown of the copper tubing shall be clean white masonry sand. Backfilling and compaction of material lying above a point 6 inches above the crown of the tubing and below the surface of the ground shall be as specified in Section 02315, "Trenching and Backfilling for Piping Systems".

J. Department forces will install the meters into the boxes installed by the Contractor.

END OF SECTION